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ABSTRACT

Inner speech, the process by which words are related to and converted into conceptual thoughts, is a topic of central importance within the field of speech communication, and the exploration of its role in the cognitive processes can facilitate the development of creative, logical, and critical thinking across the liberal arts curriculum. Four interdependent characteristics describe inner speech: silence; production of low levels of semantic elaboration; production of low levels of syntactic elaboration; and egocentricity. When examining the integration of inner language with the recent approaches in language arts teaching--functional (communicative), integrative, and process--several implications emerge. Teaching about inner speech facilitates 1) the learning of human communication as process; 2) the development of decentering, or the ability to understand information objectively; 3) the development of displacement, or the ability to transcend time and space via the word; 4) the development of semantic elaboration; 5) the development of syntactic elaboration; 6) the learning of contextuality; 7) the awareness of language arts as an integrated discipline; and 8) the development of appreciation for the human condition. Much effort in research, publication, and explanation must be undertaken before implementing an interdisciplinary curriculum, i.e., a liberal arts curriculum in which an understanding of the relation of thought and language undergird both what and how children think. (Thirty-four footnotes are attached.) (MM)

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The Role of Inner Speech in a Liberal Arts Curriculum

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Introduction

The process of inner speech and the level of intrapersonal communication are enigmas within our discipline. They are fundamental to the entire human communication process, both as senders and receivers, encoders and decoders. If, for purposes of analysis, we view communication as episodic, they are the alpha and the omega of human symbolic interaction. But less is known, published, and taught about inner speech and intrapersonal communication than any other major facets of human communication.

This paper examines the concept of inner speech not only within the parameters of our discipline but also in terms of its role in the language arts curriculum and, by extension, the liberal arts curriculum. The paper is divided into four sections: (1) a review of the nature of inner speech, (2) recent developments in language arts, (3) the role of inner speech in the integrated language arts curriculum, and (4) recommendations for future research in inner speech as it pertains to the liberal arts curriculum.

A Review of the Nature of Inner Speech

A quarter century ago, Lev Semenovich Vygotsky's last work, Thought and Language,[1] originally published posthumously in Moscow in 1934, was published in English. Although very few articles have been published on the subject of inner speech, every scholarly investigation

of the subject begins with a reference to this classic work. Other Soviet scientists, especially A. N. Sokolov[2] and a handful of colleagues, have advanced our understanding of inner speech. In this country, Frank E. X. Dance was the first to seriously examine Vygotsky's and Sokolov's and other Soviet scientists' works on the subject and to integrate them into the literature of our discipline. Vygotsky's emphasis of inner speech as a key variable in the relationship between thought and language makes it all the more significant. Jerome Bruner has observed that although the principal theme of Vygotsky's work is the relation of thought and language, ". . . it is more deeply a presentation of a highly original and thoughtful theory of intellectual development. Vygotsky's conception of development is at the same time a theory of education."[4]

Among the most recent articles on inner speech, John Johnson's is perhaps the most informative in that it concisely examines the functional and structural characteristics of inner speech, relates inner speech to extrapersonal speech, and identifies four "rules" for interfacing intrapersonal and extrapersonal language as they relate to inner speech.[5] The reader who wishes elaboration of the following review will find Johnson's article most valuable.

Functionally, Johnson explained inner speech as an intrapersonal process specifically designed to generate associations between or among concepts. Inner speech is the process by which words are related to and converted into conceptual thoughts.

Structurally, Johnson described four interdependent characteristics of inner speech. First, it is always silent. The production of sound during inner speech is made by speech kinesthesias. Second, it produces very low levels of semantic elaboration. A single word or cluster of words in inner speech is all that is necessary to generate a host of thoughts in the most expeditious manner. Third, it produces very low levels of syntactic elaboration. Not only are very few words used but very few syntactic types of words are used. Inner speech consists almost exclusively of predicates. Fourth, it is highly egocentric. Although inner speech may eventuate in meaningful extrapersonal communication, its function is foremost an intrapersonal one.

The function and structural characteristics of inner speech render it useful and literally meaningful only to self, only on the intrapersonal level.

Recent Developments in Language Arts

During the past dozen years and especially the 1980's, literature in the language arts has been replete with articles calling for change. Three new approaches are most noticeable: the functional (communicative) approach, the integrative approach, and the "process" (as opposed to "product") approach to language use, be the mode listening, speaking, reading, or writing. Despite the traditional motivation to stake

departmental claim to subject matter, there has been a noticeable shift from protectionist rhetoric to investigations and publications which simply address the question: "How can language arts instruction best serve the needs of students?"

Having been a member of the task force which wrote the Guide to Curriculum Planning in the Language Arts[6] for the Wisconsin Department of Public Instruction, I witnessed these changes and approaches firsthand. As was the case with curriculum teams in other states, we were charged to deliver a research-based, current, usable document. In the absence of protectionism, we simply went where the research took us as we sought to answer the three questions central to any curriculum document: in the words of Bruner, "What shall be taught, when, and how?"[7]

In newly developed curricula, learning about language has been correctly relegated to the status of means to end. Learning to use language is the end. But even the most emphatic and notable commentators on language arts curricula acknowledge that knowledge about the process is necessary to the development of skills, thereby confirming what Whitehead,[8] Bruner,[9] and others have emphasized for years: students must be introduced to the process and structure of a discipline -- not merely and not necessarily after being introduced to skills. Walter Loban notes, for example, "Granted some instruction about language is necessary, especially . . . where instruction about decoding and encoding becomes crucial."[10] James Moffett has argued that the most important facets of education -- in all disciplines --

involve knowledge of generalities and concepts, not knowledge of the subject matter itself in discursive, discrete, skill form.[11]

Moffett and Loban also share a perception of the functional, integrated, process-oriented curriculum which calls for a focus on components central to all academic disciplines. Loban observes that

> All of us forget that language is very different from the other subjects in school; it is internal and the other subjects are external. Just as fish gotta swim and birds gotta fly . . . so human beings gotta talk. We come wired for sound; we have this natural propensity to develop language, a propensity as natural as putting our thumbs against the rest of our fingers. . . but because such language abilities are embedded in this internal human propensity, the major thrust must be one of using such abilities in genuinely communicative situations. Our volition and emotion need to be involved as well as our most intense cognition.[12]

Loban's final sentence takes on greater significance if we emphasize it differently. Volition and emotion are indeed significant components of effective extrapersonal communication; but our most intense cognition -- rooted in inner speech and intrapersonal communication -- is what is all too often taken for granted. Having come "wired for sound," we have done little to examine the process which undergirds "this natural propensity to develop language" and eventuates in all the modes of linguistic interaction regardless of the subject matter.

Moffett has correctly identified the linguistic basis of curricula and concluded one of his major works with a call for a truly integrated curriculum, the center of which, by any other name, is inner speech.

> So I would like to end with the proposal that educators work toward a future reorganization of the total curriculum that would eliminate conventional subject divisions and would base learning on the central process of human

> symbolization. The distinctions between modes and levels of abstraction are far more important than distinctions in subject content. The most important things children of today will need to know . . . are how experience is abstracted, communicated, and utilized, whether the data are recurring phenomena of nature and society or the private truths of the heart.[13]

Despite the recentness of the three major approaches which characterize development of language arts instruction, the educational establishment seems quite willing to accept them. Both research and classroom experience attest to the prudence of emphasizing the process of language learning rather than the product, integrating all the modes of language skills and concepts in genuine learning activities, and stressing that effective communication is the function (purpose) of using language. The notion of reorganizing curricula around symbolization and abstraction (words and thoughts) -- the two components of inner speech -- is an idea whose time may have come but its acceptance has not

If inner speech is indeed integral to students' functioning -- in language arts and in all subject areas -- then an examination of its implications for an integrated language arts curriculum may facilitate its acceptance in the future.

The Role of Inner Speech in the Integrated Language Arts Curriculum

In the Communication Education article immediately following Johnson's, I identified and discussed eight implications for the teaching about inner speech in the integrated language arts curriculum.[14] The implications arose not only from the function and structure of inner speech but also from Vygotsky's repeated emphasis of the

notion that inner speech constitutes the biological/developmental underpinning which enables both extrapersonal communication and sophistication of higher mental processes to accrue. Bruner found Vygotsky's interdependent theories of development and instruction particularly noteworthy for two reasons: first, he was concerned with maximum competencies which accrue when ". . . higher ordered structures . . . replace and give new power to the conceptual structures that one climbed over en route to higher order mastery;[15] and second, he recognized the prudence of Vygotsky's approach to interrelate conceptual awareness with behavioral skills. If Vygotsky's concept of inner speech has such rich instructional potential, it must generate implications for pedagogy in the integrated language arts curriculum. The following eight implications seemed to emerge quite readily.

(1) Teaching about inner speech facilitates the learning of human communication as process. Since inner speech is central to the thinking process, it is important that students know something about it as a phenomenon central to all forms of symbolic communication. We teach students to learn how to use language, how to communicate thoughts through words, and how to interpret the words and thoughts of others. Their development of these competencies will likely be enhanced if their instruction includes an understanding of the process which marks the beginning and the end of the word-thought, thought-word process. Such instruction, for example, should enhance their understanding

of encoding (in speaking and writing) and decoding (in listening and reading). Instruction about inner speech in even the most elementary fashion contributes to students' perception of human communication as a process of interrelated functions, not as static events or isolated episodes.

(2) Teaching about inner speech facilitates the development of decentering. Decentering, or the ability to understand information objectively from another's point of view, is of paramount importance in language arts instruction. In numerous works Piaget discusses the movement from egocentism to decentered thought as a cognitive prerequisite for meaningful instruction.[16] Dance and Larson reaffirm the ability to decenter as a significant factor in the development and maturity of the self.[17] But there is always a tendency against decentering, for regardless of whether the information is communicated to or from the individual, it must always be processed in the form of inner speech. Inspeech class, for example, how often have speakers failed to decenter in audience analysis? In literature classes, how often have readers failed to see the poet's or novelist's point of view? Since the objective of developing decentering transcends the language arts curriculum and since the intrapersonal, egocentric nature of inner speech mitigates against decentering, students are more likely to develop it if they understand its roots in inner speech.

(3)Teaching about inner speech facilitates the development of displacement. Displacement refers to the ability to transcend time

and space via the word. Hocket characterized it as a significant design characteristic of symbolic language.[18] Korzybski perceived the unique ability to use the symbol to transcend time and space as one of the most significant human characteristics.[19] The instructional process -- in the language arts and throughout the entire liberal arts curriculum -- is largely vicarious, i.e., accomplished through the symbol rather than direct experience. Students move through time and space with scarcely an awareness of their reliance upon language in doing so. Displacement finds its roots in inner speech. It is closely related to decentering in that both involve movement away from self in time, space, and experience to relate objectively to another or, intrapersonally, to explore an idea in a non-egocentric way. The ability to construct and communicate thoughts which relate to both perception (here-and-now) and conception (there-and-then) is of such important transfer value across the curriculum that instruction in its relation to inner speech seems to be a fundamental responsibility.

(4) Teaching about inner speech facilitates the development of semantic elaboration. The study of inner speech facilitates students' understanding of why the meanings of thoughts may be clear for one communicant but unclear for others. Once they understand that the word-thought, thought-word cycle of inner speech is characterized by low levels of semantic elaboration, they have a basis for the development of semantic competencies which can render semantic elaboration effective. Once students realize that their level of semantic elaboration in inner speech is far too restrictive for effective extrapersonal

communication, their extrapersonal skills are likely to be sharpened. Students can easily see semantic elaboration as a responsibility consistent with decentering and displacement as well as a useful basis for the development of competencies needed to cope with the semantic constraints imposed on extrapersonal human communication.

(5) Teaching about inner speech facilitates the development of syntactic elaboration. Just as students realize that their inner speech is semantically restricted, so will they realize that it is syntactically restricted. While inner speech is highly predicative and characterized by little or no redundancy, extrapersonal communication always requires substantial syntactic elaboration. An understanding of the syntax of inner speech facilitates the understanding of the need for varying degrees of syntactic elaboration as determined by audience and context in extrapersonal communication.

(6) Teaching about inner speech facilitates the learning of contextuality. Because communication takes place in varying contexts, it is constrained by factors which make specific adjustments necessary in order for it to be effective. On the intrapersonal level, very few adjustments have to be made. On the extrapersonal level, many have to be made. Factors such as the sophistication of information, aptitude and intelligence of receivers, immediacy of feedback, and amount of feedforward and feedback all combine to affect the nature of the context and the adjustments required. Moreover, because speaking and writing contexts vary greatly, it is important to understand that "speech is not spoken writing,"[20] just as writing is not

written speech. Similar distinctions can be made for listening and reading. As important as contextuality is in extrapersonal communication, the abbreviated, predicative nature of inner speech functions in the absence of contexts. Students' learning of contextuality can be enhanced if they are taught to see beyond the condensed, predicative, autonomous nature of inner speech to determine the levels of semantic and syntactic elaboration which are dictated by the contexts in which their communication occurs.

(7) Teaching about inner speech facilitates the awareness of language arts as an integrated discipline. The departmentalized nature of school and the customary absence of an integrated perspective with which the spoken and written modes are taught tend to restrict both the teachers' perspective and the students' development of language arts.[21] Since inner speech is basic to all human communication and all language arts, knowledge of it encourages an integrated understanding and development. As Johnson quite clearly postulated,

> Listening and reading are ostensive speech skills involving the transformations of words into conceptual thoughts. . . . Speaking and writing are ostensive speech skills involving the transformation of thoughts into words. It is important to note that the various forms ... of ostensive human communication retain, to varying degrees, the basic characteristics of inner speech.[22]

Daniel Fader emphasizes the importance of students' awareness of the integration of language.

> "Listen to yourselves," I tell my students. . . . Give me no sentences that you have not spoken aloud before giving them to me. If they do not sound right to you, they won't read right to me.[23]

(8) Teaching about inner speech facilitates the development of appreciation for the human condition. The process of inner speech is fascinating. It should be taught not only because it informs other facets of human communication but also because it is simply an integral part of the language arts. A teacher of physics does not teach the concept of density just to inform students of its application to their study of particular types of matter, but rather because it is integral to the study of physics. The teacher of language arts is afforded the opportunity not only to to invite students to consider the function and structure of inner speech but also, in doing so, to come to analyze and appreciate the tremendous significance of a unique feature of their human condition which they doubtless have come to take for granted.

It has long been an accepted role of the school to be a primary institution of society by which we perpetuate the uniquenesses of the human condition. The distinction to which mankind claims our uniqueness is a cognitive one, and thus our zoological classification as sapient creatures is central to all that underlies our truly human behavior. Since inner speech is the central process in the distinction of a human self and the cognition of human beings, it seems apparent that teaching about inner speech can facilitate the development of students' appreciation of their human condition and of the cognitive processes unique to it.

Recommendations for Future Research in Inner Speech As It Pertains to the Liberal Arts Curriculum

Last has observed that "Children do not read reading or write writing or speak speech."[24] Language is the symbolic means by which the subjects of all disciplines are made meaningful. Moffett and Wagner analogize that ". . . language is not just one more garment hanging among others on a rack. It is the weaving principle by which garments come into existence. This makes it the warp and woof of the whole academic curriculum." [25]

The language process in the construction of concepts and the connections the child makes with them is inner speech; it is fundamental to all disciplines. The development and use of the mental processes rooted in inner speech determine the extent and effectiveness of learning across the curriculum. Moreover, as Wells and Wells note,

> . . . since learning tends to be cumulative [children] need to be helped to work systematically, reflecting upon what they already know and using existing knowledge as a bridgehead for the taking over of new knowledge and the mastery of new procedures and skills.
>
> Yet the actual learning can only take place in the mind of the individual pupil. Only the pupil can construct the concepts and make connections between them, forge new ideas, and articulate them in the solution of problems. 26

However, failure to master fundamental mental processes not only renders subsequent learning problematic; it also complicates diagnosis of learning difficulties. In this respect, Moffett and Wagner speak of a cognitive ladder consisting of conceptualization (internal), verbalization (internal and external), and literacy (external). Their

commentary about difficulties attending the teaching of language applies across the curriculum.

> Much confusion in language teaching has resulted from the fact that anyone reading or writing necessarily merges all three levels of coding. Teachers have too often assumed that when a student is performing at the level of literacy, the difficulties he has must be of that level, whereas the difficulties may be of any one of the three levels or of all at once. . . . Despite all the hue and cry about "basic skills," most problems facing language teachers do not concern spelling, punctuation, and word recognition nearly so much as they do thinking and speaking, which are the true basic skills. But because the problems manifest themselves at the literacy level that students are asked to perform on -- that is, in reading and writing -- the problems look as if they are problems of literacy. . . . (T)he really difficult learning issues are at the level of verbalization, where meaning is involved, not at the level of literacy. 27

They therefore conclude,

> School should focus on thinking, to match thought with speech, and verbalizing, to match mind with mind. "Language Arts" is what language arts are -- speaking, listening, reading, and writing. There are four activities because people encode and decode language at two levels -- oral and written. We have to keep in mind the fifth activity, thinking, which grounds the other four. 28

As students move through any well formulated curriculum, they should increase their mastery not only of what they learn but also the thinking process by which they learn. Herein lies the essence of Bruner's observation that Vygotsky's conception of development is simultaneously a theory of education. Moreover, if language is integral to meaningful thought, then it can be hypothesized that the more students know about how language functions in relation to thought, the more effective they will be in their use of language to think

and learn in all disciplines (via decentering, displacement, etc.).

The National Council of Teachers of English addressed the relation of thought and language and in its Essentials of English imposed significant responsibilities on language arts teachers.

> Because thinking and language are closely linked, teachers of English have always held that one of their main duties is to teach students how to think. Thinking skills, involved in the study of all disciplines, are inherent in the reading, writing, speaking, listening, and observing involved in the study of English. The ability to analyze, classify, compare, formulate hypotheses, make inferences, and draw conclusions is essential to the reasoning processes. . . . [29]

Thinking skills were then grouped in three major categories: creative thinking, logical thinking, and critical thinking. Creative thinking involves the study of language in order to enrich students' learning "that originality derives from the uniqueness of the individual's perception, not necessarily from an innate talent" and that "inventiveness involves seeing new relationships." Logical thinking involves the study of language in order "to create hypotheses and create outcomes," "to construct logical sequences and understand the conclusions to which they lead," and "to recognize that 'how to think' is different from 'what to think.' Critical thinking involves the study of language "to ask questions in order to discover meaning," "to differentiate between subjective and objective viewpoints; to discriminate between opinion and fact," and "to make judgments based on criteria that can be supported and explained." [30]

As more scholars identify the intrapersonal process of inner speech and research, publish, and clarify it as the cognitive process

central to language usage and all types of thinking, we will inevitably engender subsequent development and sophistication of its use. Moffett's view parallels Vygotsky's, and save for identifying inner speech by name, aptly discusses the importance of building upon its foundation in all disciplines.

> Nothing less than the growth of the whole human being requires a new integration of learning. What is common to all subjects should be the unifying force of schools, and what is common is precisely the human capacity to symbolize first- and second-hand experience into an inner world to match against and deal with the outer world. The infant does this already. Such a capacity is not taught; it can only be exercised more or less beneficially. It operates on all fronts at once, at all ages. Education as we know it hinders the growth of this capacity perhaps more than it fosters it. The learner expends most of his intelligence coping with the demands of arbitrary contents and arbitrary schedules instead of using his native apparatus to build his own knowledge structures from what he and others have abstracted. . . . (T)his primary activity, I submit, should gain priority over all else in education. 31

James Britton also has emphasized the significance of this developmental perspective of education. "What is important is to realize, as Moffett points out, that the more abstract processes derive from and remain dependent on those at lower levels. Thus the series of categories [of less sophisticated to more sophisticated thought] has clear developmental implications." 32

The formulation of an interdisciplinary curriculum, i.e., a liberal arts curriculum in which an understanding of the relation thought and language undergird both what and how children think, will likely remain only a theoretical scheme of scholars such as

Vygotsky, Bruner, Moffett, Loban, and Britton. Therefore much effort in research, publication, and explanation must be undertaken before an institution so entrenched in tradition is moved to change. Those of us in the discipline of speech communication can be leading contributors, but only if knowledgeable. Rod Korba, in writing the proposal describing this program noted that

> Inner speech lies at the neurophysiological and psychological nadir of comprehension. Research in cognitive psychophysiology has produced a body of knowledge expedient to communication researchers examining the structure and function of intrapersonal language behavior. . . , yet the literature in human communication is nearly void of any reference to these studies save the briefest acknowledgement of their existence. Insofar as intrapersonal communication (inner speech) is the progenitor of interpersonal communication (external speech), a significant community of scholars remain virtually unaware of the multiple contributions of cognitive psychophysiology to the processes of human communication.[33]

But given the emerging awareness of the significance of intrapersonal communication and inner speech -- both to the human communication process and to the cognitive development of the individual -- it would appear that our Association might prudently call for further research pertaining to the following questions:

What is the role of inner speech in the intrapersonal communication process?

How can knowledge of inner speech inform the effective use of extrapersonal human communication?

How can the K - 12 scope and sequence of the language arts curriculum be enhanced by the teaching and learning of inner speech?

How can creative, logical, and critical thinking across the liberal arts curriculum be enhanced by instruction about inner speech and intrapersonal communication?

These questions, of course, are only representative of the research we can and must pursue. They constitute only fragments of what we need to know. Yet Johnson's observation attests to their significance.

> Our future ability to teach both an understanding and use of human communication will to a very large degree be dependent on the types of research we pursue. The nature and role of inner speech is one area which cannot and should not be overlooked in either communication research or communication pedagogy. 34

Conclusion

The purpose of this paper has been to pursue the study of the role of inner speech both within the language arts curriculum and across the liberal arts curriculum. The concept of inner speech is clearly a topic of central importance within the province of our discipline. Just as physicists could not escape their responsibility to investigate the atom, nor geneticists DNA, scholars in the discipline of speech communication must accept the responsibility to investigate fully the intrapersonal process of inner speech. We ourselves must become more familiar with its function and structure. We must make clear its implications for all language arts teachers. And finally, we must explore its role in cognitive processes so as to facilitate the development of creative, logical, and critical thinking across the entire liberal arts curriculum.

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33. Rod Korba, proposal for program on Inner Speech and Intrapersonal Communication at SCA Convention, Boston, 1987, (unpublished).

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